

## Unifying Theme: Balance & Motion

### Essential Standards and Clarifying Objectives

#### 1.P.1 Understand how forces (pushes or pulls) affect the motion of an object.

**1.P.1.1** Explain the importance of a push or pull to changing the motion of an object.

**1.P.1.2** Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.

**1.P.1.3** Predict the effect of a given force on the motion of an object, including balanced forces.

#### K.P.1 Understand the positions and motions of objects and organisms observed in the environment.

**K.P.1.2** Give examples of different ways objects and organisms move (to include falling to the ground when dropped).

### Unpacking

What does this clarifying objective mean a child will know, understand and be able to do?

**1.P.1.1** Students know a force is a push or pull. Students know a force, a push or pull, can change the motion of an object in three ways: go faster, slower, or change the direction of the motion. Students know a force (a push or pull) is needed to start objects moving, keep objects moving, or stop objects that are moving.

**1.P.1.2** Students know magnets exert an unseen force that makes some things move without touching them. Students know magnets have poles that attract or repel each other. *Students know that air resistance can act as a force that initiates rotational motion.*

**1.P.1.3** Students know the size of the change in motion of an object is based on the amount of force applied to the object. Students know that balance is associated with position and weight.

**K.P.1.2** Students know that various ways that living and nonliving things can move. Students know that earth pulls down on all objects and organisms. Students know how to observe, describe, and discuss all kinds of moving things – themselves, insects, birds, trees, fans, volleyballs, wagons, etc. – keeping notes, drawing pictures to suggest their motion. Students know how to raise questions about the movement of various organisms and objects to include: *Do they move in a straight line or zigzag? Is their motion fast or slow? How can you tell?*